

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application of:

Phillip Dan Cook and Muthiah Manoharan

Group Art Unit: Not Yet Known

For: PHOSPHOROTHIOATE
OLIGONUCLEOTIDES HAVING
MODIFIED INTERNUCLEOSIDE
LINKAGES

Examiner: Not Yet Known

DECLARATION AND POWER OF ATTORNEY

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name; and

I believe that I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a

☒ Utility Patent ☐ Design Patent

is sought on the invention, whose title appears above, the specification of which:

- ☐ is attached hereto.
- ☒ was filed on July 14, 1998 as Serial No. 09/115,027.
- ☐ said application having been amended on _____.

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose to the U.S. Patent and Trademark Office all information known to be material to the patentability of this application in accordance with 37 CFR § 1.56.

I hereby claim foreign priority benefits under 35 U.S.C. § 119(a-d) of any **foreign application(s)** for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of any application on which priority is claimed:

Priority Claimed (If X'd)	Country	Serial Number	Date Filed
<input type="checkbox"/>	_____	_____	_____
<input type="checkbox"/>	_____	_____	_____
<input type="checkbox"/>	_____	_____	_____
<input type="checkbox"/>	_____	_____	_____

I hereby claim the benefit under 35 U.S.C. § 120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of 35 U.S.C. § 112, I acknowledge the duty to disclose to the U.S. Patent and Trademark Office all information known to be material to patentability as defined in 37 CFR § 1.56 which became available between the filing date of the prior application and the national or PCT international filing date of this application:

Serial Number	Date Filed	Patented/Pending/Abandoned
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

I hereby claim the benefit under 35 U.S.C. § 119(e) of any United States provisional application(s) listed below:

Serial Number

Date Filed

I hereby appoint the following persons of the firm of **WOODCOCK WASHBURN KURTZ MACKIEWICZ & NORRIS LLP**, One Liberty Place - 46th Floor, Philadelphia, Pennsylvania 19103 and **Herb Boswell and Laurel Bernstein** Registration Nos. **27,311 and 37,280** of **ISIS Pharmaceuticals**, 2292 Faraday Avenue, Carlsbad, California 92008 as attorney(s) and/or agent(s) to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith: £

Joseph Lucci Reg. No. 33,307

John W. Caldwell Reg. No. 28,937

Address all telephone calls and correspondence to the first-listed attorney of record at:

**WOODCOCK WASHBURN KURTZ
MACKIEWICZ & NORRIS LLP**
One Liberty Place - 46th Floor
Philadelphia PA 19103
Telephone No.: (215) 568-3100
Facsimile No.: (215) 568-3439

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Name:	<u>Phillip Dan Cook</u>
Phillip Dan Cook	Signature
Mailing Address:	Date of Signature: <u>9/18/98</u>
1155 La Casa	Citizenship: <u>USA</u>
City/State of Actual Residence:	
Lake San Marcos, CA 92069	

Name:	<u>Muthiah Manoharan</u>
Muthiah Manoharan	Signature
Mailing Address:	Date of Signature: <u>9/18/98</u>
7634 Reposado Drive	Citizenship: <u>USA</u>
City/State of Actual Residence:	
Carlsbad, CA 92009	

Name	
	Signature
	Date of Signature: _____
Mailing Address	Citizenship: _____
City/State of Actual Residence	

DOCKET NO.: ISIS-4718

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re patent application of:

Cook and Manoharan

Serial No.: Not Assigned

Group No.: Not Assigned

Filed: Herewith

Examiner: Not Assigned

For: **PHOSPHOROTHIOATE OLIGONUCLEOTIDES HAVING MODIFIED
INTERNUCLEOSIDE LINKAGES**

Assistant Commissioner for Patents
Washington, DC 20231

Sir:

ASSOCIATE POWER OF ATTORNEY

The undersigned, **Michael P. Straher**, Registration No. **38,325**, of the firm

WOODCOCK WASHBURN KURTZ MACKIEWICZ & NORRIS LLP, One Liberty Place -

46th Floor, Philadelphia, Pennsylvania 19103, Attorney and/or Agent for Applicant(s), hereby

appoints the following:

Robert B. Washburn	Registration No. 16,574	Michael D. Stein	Registration No. 34,734
Richard E. Kurtz	Registration No. 19,263	Albert J. Marcellino	Registration No. 34,664
John J. Mackiewicz	Registration No. 19,709	David R. Bailey	Registration No. 35,057
Norman L. Norris	Registration No. 24,196	Doreen Yatko Trujillo	Registration No. 35,719
Dale M. Heist	Registration No. 28,425	Barbara L. Mullin	Registration No. 38,250
John W. Caldwell	Registration No. 28,937	Kevin M. Flannery	Registration No. 35,871
Gary H. Levin	Registration No. 28,734	David A. Cherry	Registration No. 35,099
Steven J. Rocci	Registration No. 30,489	Terence P. Strobaugh	Registration No. 25,460
Dianne B. Elderkin	Registration No. 28,598	Lynn A. Malinoski	Registration No. 38,788
John P. Donohue, Jr.	Registration No. 29,916	Michael J. Swope	Registration No. 38,041
Henrik D. Parker	Registration No. 31,863	Michael J. Bonella	Registration No. 41,628
Suzanne E. Miller	Registration No. 32,279	Harold H. Fullmer	Registration No. 42,560
Lynn B. Morreale	Registration No. 32,842	William R. Richter	Registration No. 43,879
Mark DeLuca	Registration No. 33,229	John E. McGlynn	Registration No. 42,863
Joseph Lucci	Registration No. 33,307	Jonathan M. Waldman	Registration No. 40,861
Michael P. Dunnam	Registration No. 32,611	Chad Ziegler	Registration No. 44,273

Gwilym J.O. Attwell Registration No. 45,449
David N. Farsiou Registration No. 44,104
Paul K. Legaard Registration No. 38,534
Maureen S. Gibbons Registration No. 44,121
Steven H. Meyer Registration No. 37,189
Paul B. Milcetic Registration No. 46,261
Joseph R. Condo Registration No. 42,431
Michael K. Jones Registration No. 41,100
Frank T. Carroll Registration No. 42,392
Mark J. Rosen Registration No. 39,822
Mitchell R. Brustein Registration No. 38,394
Eric H. Vance Registration No. 47,151
Peter M. Ullman Registration No. 43,963
Thomas E. Watson Registration No. 43,243
Richard B. LeBlanc Registration No. 39,495

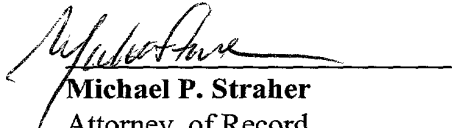
Joseph D. Rossi Registration No. 47,039
George J. Awad Registration No. 46,528
Steven D. Maslowski Registration No. 46,905
S. Maurice Valla Registration No. 43,966
Vincent J. Rocchia Registration No. 43,887
Robin S. Quartin Registration No. 45,028
Christine A. Goddard Registration No. 46,731
Gregory L. Hillyer Registration No. 44,154
Patrick J. Farley Registration No. 42,524
Ellen M. Klann Registration No. 44,836
Steven B. Samuels Registration No. 37,711
Susan C. Murphy Registration No. 46,221
Roseleen P. Morris Registration No. P47,321

and

Herb Boswell Registration No. 27,311
Laurel Bernstein Registration No. 37,280
Robert S. Andrews Registration No. 44,508
April Logan Registration No. 33,950
Neil S. Bartfeld Registration No. 39,901

of **ISIS PHARMACEUTICALS**, 2292 Faraday Avenue, Carlsbad, California 92008; his associates, with full power to prosecute the above-identified application and to transact all business in the Patent Office connected therewith and requests that correspondence continue to be directed to the firm of **WOODCOCK WASHBURN KURTZ MACKIEWICZ & NORRIS LLP** at the above address.

Date: *March 14, 2001*


Michael P. Straher
Attorney of Record
Registration No. **38,325**

**WOODCOCK WASHBURN KURTZ
MACKIEWICZ & NORRIS LLP**
One Liberty Place - 46th Floor
Philadelphia, PA 19103
(215) 568-3100